

## UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 09/212,915 12/16/98 TAKASU Н A28838-I-A **EXAMINER** MM91/0222 BAKER & BOTTS ESTRADA **ART UNIT** PAPER NUMBER 30 ROCKEFELLER PLAZA NEW YORK NY 10112 2823 **DATE MAILED:** 02/22/01

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

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Office Action Summary	Application No.	Applicant(s)
	09/212,915	TAKASU, HIDEMI
	Examiner	Art Unit
	Michelle Estrada	2823
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status		
1) Responsive to communication(s) filed on	•	
2a)⊠ This action is <b>FINAL</b> . 2b)⊡ Thi	s action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>1 and 3-9</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1 and 3-9</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claims are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examiner.		
10) The drawing(s) filed on is/are objected to by the Examiner.		
11) The proposed drawing correction filed on is: a) approved b) disapproved.		
12) The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. § 119		
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this National Stage		
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.		
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).		
Attachment(s)	<del></del>	
<ul> <li>15) Notice of References Cited (PTO-892)</li> <li>16) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>17) Information Disclosure Statement(s) (PTO-1449) Paper No(s)</li> </ul>	19) Notice of Informal f	/ (PTO-413) Paper No(s) Patent Application (PTO-152)

U.S. Patent and Trademark Office PTO-326 (Rev. 01-01) Application/Control Number: 09/212,915

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## Response to Amendment

In page 1, the parent data after that inserted by amendment should be deleted.

Claims 1 and 3-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yoshida et al. and the following comments.

The rejection is maintained as stated in the office action mailed 8/30/00.

Applicant argues that there is no chance that crystal defects are caused in the substrate surface and no autodoping of the epitaxial layer is caused. However, the claims are not so limited. Applicant is labeling a portion of the implanted region that does not reach the surface of the substrate while acknowledging that ions reside above the portion at the first full paragraph on page 4 of the amendment filed 12/4/00.

Applicant argues that the implanted region is produced at the surface. However, applicant is directed to region 6' as shown in figures 5 and 6.

Applicant argues that there is no suggestion to shift the internal temperature prior to an epitaxial growth step. However, use of a single reactor and choice of process temperatures is suggested as stated in the office action mailed 8/30/00.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Estrada whose telephone number is 703-308-0729. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 703-308-4918. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 (7724, 3431 and 3432) for regular communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

George Fourson
Primary Examiner
Art Unit 2823

MEstrada

February 12, 2001